
Subject: Re: Speed does matter
Posted by [wlandsman](#) on Mon, 17 Oct 2016 18:34:21 GMT
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On Monday, October 17, 2016 at 3:17:23 AM UTC-4, Kallisthène wrote:

>
> Some have been pestering for years Exelis and Harris to simply recompile their software with Intel-MKL.
> Right now I am enjoying a 40 speedup on SVD over IDL by using the IDL-Python bridge.

Thanks for pushing on this. It does seem that Harris Geospatial needs to update IDL to keep it speed competitive with other interpreted programs.
As you note, MATLAB now has available both just-in-time compilation, and Intel MKL compilation.

<https://www.mathworks.com/products/matlab/matlab-execution-engine/>
<https://software.intel.com/en-us/articles/using-intel-math-kernel-library-with-mathworks-matlab-on-intel-xeon-phi-coprocessor-system>

And Python has "broadcasting" syntax
<https://docs.scipy.org/doc/numpy/user/basics.broadcasting.html>

I should note though, that I was recently able to speed up a matrix-heavy IDL computation by a factor of 3 by judicious use of the BLAS_AXPY (and REPLICATE_INPLACE) routine. --Wayne
